



State of Wisconsin

DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny  
Secretary

Box 7921

Madison, Wisconsin 53707

November 3, 1989

RECEIVED

NOV 08 1989

IN REPLY REFER TO: 4440

Ms. Linda Martin  
Project Manager  
US EPA Region V 5HR-12  
230 South Dearborn St.  
Chicago, IL 60604

OFFICE OF RCRA  
WASTE MANAGEMENT DIVISION  
EPA, REGION V

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NOV 16 1989  
SUPERFUND PROGRAM

SUBJECT: Johnson Controls - Teutonia Avenue

Dear Ms. Martin:

Enclosed is the Screening Site Inspection Workplan and Sampling Plan for the Johnson Controls - Teutonia Avenue. Before leaving his position as Project Manager for Wisconsin, Daryl Owens requested that WDNR send the Sampling Plans along with the Workplans to EPA in order to give more information about the site. WDNR will continue to send them to you unless you feel that it is unnecessary.

Please contact Chuck Warzecha (608) 267-5063 or Robin Schmidt (608) 267-7569 of my staff with any questions or comments.

Thank You.

Sincerely,

Suzanne Bangert  
Superfund Unit Leader  
Environmental Response and Repair Section  
Bureau of Solid and Hazardous Waste Management

cc. Robin Schmidt - SW/3  
Chuck Warzecha - SW/3  
Margaret Greafe - SED

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NOV 17 1989  
Pre-Renewal

Non-Responsive

US EPA RECORDS CENTER REGION 5



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Wisconsin Department of Natural Resources  
Site Inspection Workplan

Site Name: Johnson Controls, Inc. - Teutonia Ave ID#WID000808865

Location: 5400 N. Teutonia Avenue

Description of Work to be Performed: \_\_\_\_\_

Proposed Date of Investigation: November 14, 1989

# Non-Responsive

Inspection Priority based on PA or projected HRS score  
High: \_\_\_\_\_ Medium: \_\_\_\_\_ Low: \_\_\_\_\_ None: \_\_\_\_\_

Waste Types: Solid ☒ Liquid ☒ Sludge \_\_\_\_\_ Gas \_\_\_\_\_  
Characteristics: Corrosive \_\_\_\_\_ Ignitable \_\_\_\_\_ Volatile \_\_\_\_\_  
Radioactive \_\_\_\_\_ Toxic ☒ Reactive \_\_\_\_\_ Unknown \_\_\_\_\_ Other \_\_\_\_\_

Facility Description: small research and experimental production facility, it operates one lead-acid battery production line

Principal Disposal Method: ship off-site

Unusual Features: spill of 10,000 gallons of untreated wastewater in 1978

Status (active, inactive, unknown): active

History of site: it is unknown at this time how long the facility has been operating; the spill in 1978 is the major concern at this site

Potential Chemicals Present: lead

LEVEL OF PROTECTION REQUIRED: A \_\_\_\_\_ B \_\_\_\_\_ C \_\_\_\_\_ D ☒

Field Work Required:

Sampling (check) : Groundwater \_\_\_\_\_ Surface Water \_\_\_\_\_

Sediment \_\_\_\_\_ Air \_\_\_\_\_ Soil ☒ Waste \_\_\_\_\_ None \_\_\_\_\_

Contract Lab Scheduled with M. McCurdy? Yes ☒ No \_\_\_\_\_

Drilling: (check) State \_\_\_\_\_ FIT \_\_\_\_\_ No Drilling \_\_\_\_\_  
(specs to be submitted in the Site Sampling Plan)

Site Safety Plan submitted (date): Oct. 13, 1989

Site Sampling Plan submitted (date or N/A): Oct. 13, 1989

Scheduled date of Sampling: Nov. 14, 1989

District Contact (sampling leader) Margaret Thacker

If no sampling, justification: \_\_\_\_\_

## Superfund Site Sampling Plan

### I. INTRODUCTION

- A. This sampling plan has been developed to document the field procedures for sampling soil that may be potentially contaminated by lead associated with prior activities at the Johnson Controls, Inc. - Teutonia Avenue facility. The hazardous waste files of the Southeast District Headquarters of the Wisconsin Department of Natural Resources provide a description of the waste types, operations, and management of the Johnson Controls, Inc. - Teutonia Avenue facility.
- B. The inspection priority of this site, based on the Preliminary Assessment, is identified as low. There are some concerns, however, which justify the need to evaluate this site:
  - 1. It is evident that 10,000 gallons of untreated wastewater has been spilled on the grounds of this facility sometime in 1978.
  - 2. The company has no record that any type of clean-up was ever conducted. No record of the incident is present in either the Bureau or SED spills files.

The analytical parameters which have been selected for the site inspection sampling should verify both the existing conditions of the soils.

- C. The State of Wisconsin Department of Natural Resources has the authority to conduct an inspection of the Johnson Controls, Inc. - Teutonia Avenue facility and collect samples as part of a Superfund Pre-remedial Site Inspection as specified in Section 104(3)(1) of SARA, 1986 and the State's environmental response and repair program (Section 144.442, Wisconsin Statutes). Johnson Controls is the legal owner of the Johnson Controls, Inc. - Teutonia Avenue facility.

### II. BACKGROUND

- A. The site is located at 5400 N. Teutonia Avenue in the NE $\frac{1}{4}$  Section 36 T8N R21E, City of Milwaukee, Milwaukee County, Wisconsin.
- B. This Johnson Controls, Inc. - Teutonia plant is a small research and experimental production facility. It operates one lead-acid battery production line. The plant is located in the City of Milwaukee in an area which is a mix of industrial as well as residential development. Lincoln Creek is approximately one-half mile south of the facility. In 1978 a tank overflowed approximately 10,000 gallons of untreated wastewater containing

high levels of lead. No attempt was made to clean-up the spill.

### III. OBJECTIVES:

The objectives of this survey are:

- A. To obtain soil samples adjacent to waste disposal areas and have them analyzed for metals, volatile organics, semi-volatile organics, and pesticides.
- B. To determine whether or not contaminants in subsoils are causing any significant groundwater contamination which may result in the migration of contaminants from the site to neighboring properties and other groundwater users.
- C. To aid in the calculation of the Hazard Ranking Score for the site.
- D. To provide detailed instructions of activities that will take place on site and designate specific tasks to individuals.

### IV. EQUIPMENT:

#### SAFETY EQUIPMENT

HAVE	PACKED	
_____	_____	air escape packs
_____	_____	fire extinguisher
_____	_____	first-aid kit
_____	_____	HNu/OVA
_____	_____	portable eye/face wash
_____	_____	tri-gas meter
_____	_____	two-way communication system

#### PERSONNEL CLOTHING

_____	_____	<u>Level B</u>
_____	_____	boot covers
_____	_____	boots (chemical-resistant, steel toe and shank)
_____	_____	gloves (latex, disposable)
_____	_____	gloves (outer)
_____	_____	hard hat
_____	_____	masking tape
_____	_____	safety glasses (or hard hat with face shield)
_____	_____	self-contained breathing apparatus (SCBA)
_____	_____	splash suit (one piece, chemical-resistant, hooded)
_____	_____	<u>Level C</u>
_____	_____	air purifying canisters
_____	_____	air purifying respirator (full-face mask)
_____	_____	boot cover

_____	_____	boots (chemical-resistant, steel toe and shank)
_____	_____	gloves (latex, disposable)
_____	_____	gloves (outer)
_____	_____	hard hat
_____	_____	masking tape
_____	_____	safety glasses (or hard hat with face shield)
_____	_____	splash suit (one-piece, chemical-resistant, hooded)

#### Level D

_____	_____	boot covers
_____	_____	boots (chemical-resistant, steel toe and shank)
_____	_____	gloves (latex, disposable)
_____	_____	gloves (outer)
_____	_____	hard hat
_____	_____	masking tape
_____	_____	safety glasses (or hard hat with face shield)
_____	_____	splash suit (one-piece, chemical resistant, hooded)

#### Optional

_____	_____	rain suit
_____	_____	winter wear

#### SAMPLING EQUIPMENT

_____	_____	binocular
_____	_____	Camera
_____	_____	coolers
_____	_____	DNR chain-of-custody seals
_____	_____	field data sheets/computer disc
_____	_____	log book/tape recorder/computer
_____	_____	overhead tarp (with rope and stakes)
_____	_____	receipts for samples
_____	_____	sample containers
_____	_____	site map
_____	_____	tool kit
_____	_____	waterproof pens, markers

#### Decontamination

_____	_____	brushes
_____	_____	buckets
_____	_____	carboys (empty)
_____	_____	carboys (with distilled water)
_____	_____	detergent
_____	_____	garbage bags
_____	_____	garden sprayer
_____	_____	nylon rope
_____	_____	paper towels
_____	_____	soap (hand and face)
_____	_____	sponges

#### Soil Sampling

_____	_____	auger
_____	_____	scoop (stainless steel)
_____	_____	spade/shovel

_____	_____	spoon (stainless steel)
_____	_____	thin-wall tube corer with cutting top
_____	_____	tray (stainless steel)
_____	_____	<u>Sediment Sampling</u>
_____	_____	nylon rope
_____	_____	ponar grab sampler
_____	_____	scoop (stainless steel)
_____	_____	spoon (stainless steel)
_____	_____	thin-wall tube corer with cutting tip and check valve
_____	_____	tray (stainless steel)
_____	_____	<u>Groundwater Sampling</u>
_____	_____	keys for locked well caps
_____	_____	water level measuring device
_____	_____	sampling and purging device
_____	_____	plastic bags or sheets to place around well
_____	_____	calibrated bucket
_____	_____	extra rope for bailer
_____	_____	transfer containers
_____	_____	sample preservatives
_____	_____	conductivity meter, standards and extra batteries
_____	_____	pH meter, buffers, extra batteries, beakers for buffers
_____	_____	sample preservatives
_____	_____	<u>Leachate Collection</u>
_____	_____	shovel for leachate seep sampling
_____	_____	plastic lining for collection points
_____	_____	pond sampler
_____	_____	bailer (possibly dedicated)
_____	_____	key to lysimeter cap
_____	_____	<u>Pond, Lagoon and Surface Water Sampling</u>
_____	_____	pond sampler
_____	_____	stream gauge
_____	_____	<u>Sludge and Waste Pile Sampling</u>
_____	_____	grain sampler
_____	_____	trowel or scoop
_____	_____	sample containers

#### PACKING AND SHIPPING EQUIPMENT

_____	_____	Central Regional Laboratory sample data report form
_____	_____	chain-of-custody forms
_____	_____	EPA chain-of-custody seals
_____	_____	federal express forms
_____	_____	ice (in sealed bags)
_____	_____	sample tags
_____	_____	tape (strapping and clear)
_____	_____	traffic report forms
_____	_____	vermiculite
_____	_____	plastic bags

#### V. PROCEDURES

- A. The soil samples will be collected as follows:

Sample 1 thru 8	2-120 ml, wide mouth vials/sample (volatiles)
(including duplicate	1-8 oz. jar/sample (semi volatiles, pesticides)
and background)	1-8 oz. jar/sample (metals).

- B. Soil samples will be collected from several locations around the property. The surface sample locations will be determined by both visual observations and soil gas monitoring with a portable photoionization detector (HNU).
- C. Surface samples for volatiles will be obtained utilizing a soil probe to a depth between 0 and 12 inches. This will be done to minimize aeration of the sample. A stainless steel spade will be utilized to obtain all other surface soil samples.
- D. All soil samples for volatiles, semi volatiles, pesticides, and metals will be placed in sample bottles and sealed and labeled upon collection. The soil samples do not require preservation. The soil samples will be placed in a cooler with ice. All soil sample bottles are supplied by the contract lab.
- E. All the sampling equipment will be cleaned before it is brought on-site. Equipment for sampling soil will be cleaned between sampling each monitoring point. Each hand auger, soil probe, sampling spoon, etc. will be cleaned in our contaminant reduction zone with Alconox soap, rinse with tap water and then rinsed three times with deionized distilled water (decon water). Specific decontamination procedures for following subsurface soil sampling equipment is specified for the contractor in the scope of work to investigate contamination.
- F. Sample collection and handling is not anticipated to be a major source of environmental exposure to hazardous chemicals or toxic substances due to what is known about this site. However, individuals handling the samples will be wearing disposable plastic/rubber gloves while the bottles are being filled. Each sample will be tagged with the following information in indelible ink: name of the collector, date and time of collection, place of collection, sample number which uniquely identifies the sample, and type of analysis required.

The chain-of-custody will be documented for all samples taken from the site. The completion of chain-of-custody record forms for the samples will ensure that all samples are handled properly.

- G. With the exception of the site owners, their representatives and our/their contractor/consultant, non-team members will not be allowed on the site. In case of rain, sampling may be delayed or may require more time to complete. Sampling will be cancelled and rescheduled in the event of a thunder storm.

## VI. LOGISTICS:

- A. Proposed date of inspection - November 14, 1989
- B. All of our personnel will arrive at the site and depart from the site in two vehicles. One of the vehicles may have four-wheel drive and will be used to transport most of our field equipment onto the site. Samples used to determine in-field parameters will be taken back to the support zone for analysis. All of our samples will be taken back to our office for final packing and shipment.
- C. List of tasks:
  - 1. Calibration of the HNu - John Krahling.
  - 2. Field notes and documentation on field data forms:
    - Margaret Graef for exclusion zone activities.
    - Chuck Warzecha for support zone activities.
  - 3. Initial and periodic site air monitoring (exclusion zone) - John Krahling
  - 4. Cleaning and set-up of field equipment etc. - All team members.
  - 5. Sample withdrawal/sample collection - Jim Schmidt
  - 6. Sample labeling - Chuck Warzecha
  - 7. Safety Officer - Margaret Graefe

## VII. QUALITY CONTROL PROCEDURES:

All equipment will be cleaned before and after being taken out into the field. The cleaning will include all procedures mentioned above and in accordance with the Department's Groundwater Sampling Procedures Guidelines.

## VIII. SAMPLING REPORT:

The sampling report will be written by the sampling leader (Margaret Graefe). A copy of the report will be kept in both the Superfund file labeled Johnson Controls, Inc. - Teutonia Avenue and the hazardous waste file for the Johnson Controls, Inc. - Teutonia Avenue. Copies of the report will be sent to Sue Bangert - SW/3.

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